### 0.a. Goal

Goal 10: Reduce inequality within and among countries

# 0.b. Target

Target 10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

## 0.c. Indicator

Indicator 10.4.1: Labour share of GDP

#### 0.d. Series

Not applicable

# 0.e. Metadata update

2022-03-31

## 0.f. Related indicators

8.2.1, 8.5.1

# 0.g. International organisations(s) responsible for global monitoring

International Labour Organization (ILO)

# 1.a. Organisation

International Labour Organization (ILO)

# 2.a. Definition and concepts

#### **Definition:**

Labour share of Gross Domestic Product (GDP) is the total compensation of employees and the labour income of the self-employed given as a percent of GDP, which is a measure of total output. It provides information about the relative share of output which accrues to workers as compared with the share that accrues to capital in the production process for a given reference period.

#### Concepts:

Compensation of employees is the total in-cash or in-kind remuneration payable to the employee by the enterprise for the work performed by the employee during the accounting period. Compensation of employees includes: (i) wages and salaries (in cash or in kind) and (ii) social insurance contributions payable by employers. This concept views compensation of employees as a cost to employer, thus compensation equals zero for unpaid work undertaken voluntarily. Moreover, it does not include taxes payable by employers on the wage and salary bill, such as payroll tax.

The indicator should be produced using data that cover all economic activities, all employees, and the self-employed. Thus, in addition to the compensation of employees, the indicator should also include the labour income of the self-employed.

GDP represents the market value of all final goods and services produced during a specific time period (for the purposes of this indicator, one year) in a country's territory.

Persons in employment are defined as all those persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit. For the sake of clarity, the term "workers" is used as shorthand for "persons in employment".

Persons in employment include employees and self-employed.

Employees are all those workers who hold the type of job defined as paid employment jobs, that is, jobs where the incumbents hold explicit or implicit employment contracts giving them a basic remuneration not directly dependent on the revenue of the unit for which they work.

The self-employed are workers in jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise. (In this context "enterprise" includes one-person operations.)

The labour income of a self-employed worker is the implicit element of the remuneration for work done by themselves, as opposed to the element of remuneration generated by the ownership of assets.

#### 2.b. Unit of measure

Percent (%)

# 2.c. Classifications

Not applicable

# 3.a. Data sources

The recommended primary data sources for this indicator are the national accounts estimates of GDP and compensation of employees. The periodicity of this indicator will hence depend on the national accounts data produced in the given country. For self-employed workers, an imputation model is necessary to account for their labour income, in combination with national accounts data.

The source of the data should be presented when providing estimates of the indicator, as well as the System of National Accounts revision (preferably the SNA 2008).

# 3.b. Data collection method

The data on compensation of employees and GDP are collected from the repository National Accounts Official Country Data. The Economic Statistics Branch of the United Nations Statistics Division (UNSD) maintains and updates the National Accounts Official Country Data database.

The necessary data to model and impute the labour of the self-employed are national household survey microdata sets in line with internationally agreed indicator concepts and definitions. The ILO Department of Statistics processes national household survey microdatasets in line with internationally-agreed indicator concepts and definitions set forth by the International Conference of Labour Statisticians (ICLS).

## 3.c. Data collection calendar

Annual for compensation of employees and GDP data and continuous for household survey microdata sets.

## 3.d. Data release calendar

The target frequency of data release is approximately biennial.

## 3.e. Data providers

National statistical offices (NSOs) are the primary providers of both the required national accounts data and household survey microdata sets.

## 3.f. Data compilers

International Labour Organization (ILO)

## 3.g. Institutional mandate

The ILO is the UN focal point for labour statistics. It sets international standards for labour statistics through the International Conference of Labour Statisticians. It also compiles and produces labour statistics with the goal of disseminating internationally comparable datasets, and provides technical assistance and training to ILO member States to support their efforts to produce high quality labour market data.

# 4.a. Rationale

Labour share of GDP seeks to inform about the relative share of GDP which accrues to workers as compared to the share which accrues to capital in a given reference period.

In order to interpret this indicator effectively, it is important to consider it together with economic growth trends. The share of labour compensation in national output can highlight the extent to which economic growth translates into higher incomes for employees over time (and/or higher earnings for the self-employed). In periods of economic recession, the labour income share provides an indication of the extent to which falling output reduces labour income relative to profits. If labour income falls at a greater rate than profits, the labour income share will be expected to fall. By contrast, if there is a sharper decline in profits than in labour income, the share will rise. For any given level of GDP and profits, the labour income share can fall as a result of falling wages, falling earnings of the self-employed, changes in the composition of employment by income or a combination of these.

Increased production and GDP often lead to improved living standards of individuals in the economy, but this will depend on the distribution of real income and public policy among other factors.

# 4.b. Comment and limitations

GDP may exclude or underreport activities that are difficult to measure, such as transactions in the informal sector or in illegal markets, etc., thus understating the GDP. Moreover, GDP does not account for the social and environmental costs of production, and is therefore not a good measure of the level of over-all wellbeing.

# 4.c. Method of computation

 $Labour\ share\ of\ Gross\ Domestic\ Product = \ \tfrac{(Total\ compensation\ of\ employees) + (Labour\ income\ of\ the\ self-employed)}{Gross\ Domestic\ Product}\ \times\ 100$ 

#### 4.d. Validation

The ILO engages in annual consultations with member States through the ILOSTAT questionnaire and related Statistics Reporting System (StaRS). National data providers receive a link to the portal where they can review all national SDG data available on ILOSTAT.

# 4.e. Adjustments

To ensure that the labour share data are internationally comparable, an adjustment for the labour income earned by the self-employed is necessary. Self-employment constitutes a large share of the global workforce. Moreover, the share of the self-employed in the total workforce tends to be higher in countries with lower national income. As a consequence, using only national accounts data on compensation of employees – computing the unadjusted labour share – reduces international comparability.

Using the ILO Harmonized Microdata collection, the labour income of the self-employed relative to the labour income of employees is imputed. The imputation is based on observable characteristics of workers, such as economic sector, occupation, education and age. For a description of the procedure please refer to sections 2.1-2.4 of: <u>The Global Labour Income Share and Distribution</u>.

The labour income of the self-employed at the national level is computed on the basis of this estimate, and is added to the numerator of the expression in 4.c.

# 4.f. Treatment of missing values (i) at country level and (ii) at regional level

#### · At country level

Multivariate regression and cross-validation techniques are used to impute missing values at the country level. The additional variables used for the imputation include a range of indicators, including labour market and economic data. For further information on the estimates, please refer to the ILO modelled estimates methodological overview, available at <a href="https://ilostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/">https://ilostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/</a>. For the detailed imputation procedure for the labour share please refer to section 2.6 of: <a href="https://ibostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/">https://ilostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/</a>. For the detailed imputation procedure for the labour share please refer to section 2.6 of: <a href="https://ibostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/">https://ilostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/</a>.

### • At regional and global levels

Not applicable (see 4.g below)

# 4.g. Regional aggregations

The aggregates are derived from the country level data (including country level imputed observations). The regional and global labour shares are obtained by first adding up, across countries, the numerator and denominator of the formula that define the labour share - outlined above. Once both magnitudes are produced at the desired level of aggregation, the ratio between the two is used to compute the share for each regional grouping and the global level. Notice that this direct aggregation method can be used due to the imputation of missing observations at the country level. For further information on the estimates, please refer to the ILO modelled estimates methodological overview, available at <a href="https://ilostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/">https://ilostat.ilo.org/resources/concepts-and-definitions/ilo-modelled-estimates/</a>

# 4.h. Methods and guidance available to countries for the compilation of the data at the national level

In order to compute this indicator, two key variables are required.

First, the national accounts estimates of GDP and compensation of employees. Comprehensive documentation on the System of National Accounts can be found here: <a href="https://unstats.un.org/unsd/nationalaccount/sna.asp">https://unstats.un.org/unsd/nationalaccount/sna.asp</a>

Second, the necessary data to model and impute the labour income of the self-employed are national household survey microdata sets. For the methodology of each national household survey, one must refer to the most comprehensive survey report or to the methodological publications of the national statistical office in question. For detailed guidance on the estimation of the labour income of the self-employed please refer to sections 2.1-2.4 of: The Global Labour Income Share and Distribution.

# 4.i. Quality management

The quality management system of the ILOSTAT database concerning modelled estimates is based on a combination of automated checks and peer review. These procedures guarantee that the standards of international comparability and time-series consistency are met.

# 4.j. Quality assurance

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Data consistency and quality checks are regularly conducted for validation of the data before dissemination in the ILOSTAT database. These checks consist of data and metadata revision of all the relevant inputs applying protocols to ensure that international comparability and time-series consistency are maintained. In many cases, input data are obtained through ILO processing of microdata sets of national household surveys. Data are also reported by national statistical offices or other relevant national agencies to the ILO Department of Statistics through its annual questionnaire on labour statistics. Data from international organizations official repositories are used as well. All these inputs are subject to the review procedure. For the resulting modelled estimates, both statistical and judgmental assessments of the output data are carried out.

# 4.k. Quality assessment

The adjustment procedure to take into account the labour income of the self-employed enhances the international comparability of the indicator. For a detailed discussion on the bias reduction assessment of the estimation procedure, please refer to section 3.1 of: <a href="https://doi.org/10.1007/jhease-nd-normalized-number-10.1007/jhease-nd-num

# 5. Data availability and disaggregation

#### Data availability:

Data for this indicator is available for 187 countries and territories.

#### Time series:

Data for this indicator is available for the period from 2004 to 2019.

#### Disaggregation:

No disaggregation is required for this indicator.

# 6. Comparability/deviation from international standards

The data on compensation of employees and GDP used for the indicator is estimated at the country level, hence no substantial discrepancies should arise. In contrast, the adjustment to reflect the labour income of the self-employed can be a source of sizeable differences between national and international estimates.

The indicator is estimated using a model to impute the labour income of the self-employed on the basis of household survey microdata sets. This is done to provide a comprehensive estimate of labour income and to enhance the international comparability of the estimates. Country level estimates might rely on different models for imputing the labour income of the self-employed or not include the self-employed labour income at all.

For a detailed description of the different procedures to produce the labour share and their performance please refer to sections 2.1-2.4, and section 3.1 of: The Global Labour Income Share and Distribution.

## 7. References and Documentation

#### URL:

https://ilostat.ilo.org/

#### References:

- ILO Guidebook Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators (https://www.ilo.org/global/statistics-and-databases/publications/WCMS\_647109/lang--en/index.htm)
- ILOSTAT: <a href="https://ilostat.ilo.org/">https://ilostat.ilo.org/</a>
- $\bullet \ \ ILO\ Social\ Protection\ Data\ and\ Indicators: https://www.ilo.org/global/topics/dw4sd/themes/sp-floor/WCMS\_560732/lang--en/index.htm$
- System of National Accounts: <a href="http://unstats.un.org/unsd/nationalaccount/sna.asp">http://unstats.un.org/unsd/nationalaccount/sna.asp</a>
- Decent Work Indicators Manual: https://www.ilo.org/integration/resources/pubs/WCMS\_229374/lang--en/index.htm
- The Global Labour Income Share and Distribution
- Labour income and inequality: <a href="https://ilostat.ilo.org/topics/labour-income/">https://ilostat.ilo.org/topics/labour-income/</a>

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